

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1. (Cancelled).
2. (Original) Method for detecting substances preventing binding of β -catenin selectively with LEF-1/TCF transcription factors, APC or conductin/axin wherein in the β -catenin molecule in the vicinity of essential binding sites hydrophobic pockets are identified and subsequently therapeutic substances fitting into this pocket are synthesised and tested.
3. (Original) Method according to claim 2 wherein β -catenin mutants were identified which mark the respective essential binding site for LEF-1/TCF transcription factors, APC or conductin, the surfaces in this region are calculated based on X-ray crystallographic analytical data of the armadillo region, thus identifying the existing hydrophobic pockets, low-molecular compounds are fitted in this pocket and are selected in a biological assay owing to their stabilizing interactions with β -catenin and their selective inhibition or promotion of complex formation with LEF/TCF, APC or conductin and these compounds are further modified, if necessary by adding acid groups.
4. (Currently amended) Method according to claim 2, wherein the β -catenin-mutants Lys 435, Arg 469, His470, Lys 508 Arg 515, which mark the essential binding site for LEF-1

- the β -catenin-mutants Phe 235, His 260, Lys 292 which mark the essential binding site for conductin,

- the β -catenin-mutants Lys 345, Trp 383, Arg 386, which mark the essential binding site for APC were identified,
- the molecule surface is calculated with the aid of the programs Grasp, Ludi and similar programs,
- a hydrophobic pocket (flanked by the amino acids Val 358, Met 363, Ala 391, Ala 392, Thr 393, Lys 394, Gln 395, Met 398, Leu 401, Leu 402, Ile 423, Asn 426, Leu 427, Thr 428, Cys 429, Asn 430, Asn 431, Asn 434, Met 437, Val 438) was identified in the vicinity of the LEF-1/TCF binding site,
- a compound selected from the group consisting of the drugs listed in the annexed "drug list" and "positive list" ~~the compounds according to the annexed "drug list" and "positive list"~~ which thus become a subject of the claim are fitted into the identified hydrophobic pocket, subsequently experimentally checked with ELISA for their inhibition of the complex formation of β -catenin and its binding partners and optimized by chemical modification.

5. (Original) Substances with a lead structure essential for binding in the hydrophobic pocket and inhibition of the formation of complexes with β -catenin marked by cephalosporines of the cefamandole type (molecule class IA), with the lead structure essential for binding in the hydrophobic pocket and inhibition of the formation of complexes with β -catenin consisting of an aromatic ring, an organic component similar to the structure of the ala-ala dipeptide and a β -lactam and thiazole ring, which are preferably cephalosporines of the cefamandole type such as e.g. cefsulodine, cefadroxil or cefamandole nafates.

6. (Original) Substances for the inhibition of the complex formation of β -catenin with LEF/TCF marked by a structure corresponding to AC-(6-O-stearoyl)-muramyl-ala-D-isoglutamine (molecule class IB).

7. (Original) Substances for the inhibition of the complex formation of β -catenin with LEF/TCF marked by a structure corresponding to that of 3,6-dihydroxybenzonobornane (molecule class IC).

8. (Currently amended) Substances binding in the hydrophobic pocket without inhibiting the formation of complexes, however affecting binding of cefamandole to β -catenin as guiding structures for developing potent inhibitors, preferably a compound selected from the group in the "positive list" ~~substances of the «positive list»~~ table which thus becomes an object of the claim.

9. (Cancelled)